

ABSTRACT OF THE DISCLOSURE

An apparatus for performing high-speed interruption of high-speed fluid jets (30) of the type used to cut food, plastics, wood, metal, and other products. The water jet (30) is interrupted by a blocking bar (22) mounted on a housing (12). The blocking bar (22) is pivoted by actuators so that the bar is disposed away from the high-speed fluid jet (30) in the open position and blockingly intersects the high-speed fluid jet (30) when in the blocking position. At least one of the actuators is an electromagnet assembly (20) and (21) having a selectively energizable coil (78) such that energizing the coil (78) will induce a magnetic field. The blocking bar (22) has an area of high magnetic permeability (114), wherein the bar (22) may be pivoted by application of the magnetic field generated by the coil (78) upon the area of high magnetic permeability (114).